# **Georgia Department of Natural Resources**

Environmental Protection Division • Watershed Protection Branch 2 Martin Luther King Jr. Drive • Suite 1152 East • Atlanta • Georgia 30334 (404) 463-1511; Fax (404) 656-2453 Judson H. Turner, Director

April 30, 2015

Ms. Juliet Cohen, Executive Director Chattahoochee Riverkeeper 3 Puritan Mill 916 Joseph E. Lowery Blvd. Atlanta, GA 30318

RE:

City of Hogansville

Water Pollution Control Plant (WPCP)

NPDES Permit No. GA0050218

(Troup County)

Dear Ms. Cohen:

Thank you for your letter regarding the permit for the City of Hogansville's proposed Water Pollution Control Plant. After consideration of your comments received on November 17, 2014, EPD has determined that the permit as drafted is protective of water quality standards and we have issued the permit.

We have included an attachment, which addresses your concerns submitted during the public comment period. We appreciate your interest in this matter.

If you have any questions, please contact Benoit Causse of my staff at 404-463-4958 or benoit.causse@dnr.state.ga.us.

Sincerely

Jeff Larson, Assistant branch Chief Watershed Protection Branch

JL\bsc

Attachment: Response to comments

Ms. Cohen April 30, 2015 Attachment Page 1 of 2

## **ATTACHMENT - Response to Comments**

Hogansville Water Pollution Control Plant (WPCP)
NPDES Permit No. GA0050218
(Troup County)

Comment # 1: (a) The proposed discharge volume of 1.5 MGD is unnecessarily large for the receiving water; (b) The population and flow projections used to support this volume cannot possibly be achieved during the 5-year permit period or the subsequent 7 permit periods.

## EPD Response:

- (a) The proposed discharge was evaluated and limits were developed assuming critical flow conditions (0.6ft³/s) in the receiving stream. In addition to protective limits, provisions have been included in the permit to conduct toxicity tests and scans for priority pollutants within the first year of operation. The instream wastewater concentration (IWC) will be about 5% if the annual mean flow is 43 ft³/s as indicated in your November 17, 2014 correspondence. The discharge will have a negligible impact on the hydraulic of the receiving stream. Therefore, the discharge volume is not too large for the receiving water.
- (b) The planning period for this project is approximately 2015-2040. The first full year of operation for the new plant will likely be 2017, resulting in a design life of approximately 23 years. The proposed 1.5-MGD discharge includes 0.5 MGD allocated to Meriwether County, leaving 1.0 MGD for the City of Hogansville. The average flow at the plant was approximately 0.43 MGD in 2014. It is anticipated that the increase in population will result in flows of 0.721 MGD to the plant in 2040. Additional capacity (0.279 MGD) has been included to accommodate expansion of the service area (replacing failing septic tanks) and to serve industrial development along Interstate 85 related to the Kia plant expansion.

Your letter specifically questioned the 336.6-gal/day·customer figure used for flow projection. This is equivalent to 144 gal/day·capita (1,250 sewer customers and population of 2,912), which is comparable to the average water use per capita in counties in the Metropolitan North Georgia Planning District. The population and flow projections are appropriate.

Comment # 2: The proposed permit limit for fecal coliform violates the Total Maximum Daily Load (TMDL) for Yellow Jacket Creek.

#### **EPD Response:**

The TMDL for Yellow Jacket Creek was established by EPA in 1998. The model used in the TMDL predicted an existing fecal coliform of 230 cfu/100mL caused by nonpoint sources including Hogansville's land treatment system. The target TMDL of 175 cfu/100mL includes a 25 cfu/100mL margin of safety. With the conversion of the Hogansville land treatment system to point source, the nonpoint source fecal coliform load will be reduced.

All facilities with the potential to discharge fecal coliform are given end-of-pipe limits equivalent to the water quality standard of 200 counts/100mL. By assigning fecal coliform bacteria limits equivalent to the water quality standard, the discharge will not cause or contribute to water quality impairment and will meet the requirements of the TMDL.

Ms. Cohen April 30, 2015 Attachment Page 2 of 2

Comment # 3: The proposed permit limits for nutrients and bacteria are significantly less stringent than permit limits at other wastewater treatment facilities in the Chattahoochee watershed and are not based on the most recent scientific data.

## EPD Response:

Yellowjacket Creek drains directly into West Point Lake. The City of Hogansville's discharge does not flow into the Chattahoochee River. In addition, the City is not a part of Metropolitan North Georgia Water Planning District. All of the examples cited in your November 17, 2014 correspondence are located in a different part of the Chattahoochee watershed where different standards apply.

The recommended total phosphorus limit of 0.50 mg/L for the proposed 1.5 MGD discharge for the City of Hogansville is in accordance with EPD's Strategy for Addressing Phosphorus Loading in State Waters for new discharges to or in close proximity to reservoirs and lakes.

The wasteload allocation was developed in 2008 using the U.S. EPA's 1999 Update of Ambient Water Quality Criteria for Ammonia. The proposed discharge was re-evaluated and it has been determined that an ammonia limit of 1.0 mg/L also meets the U.S. EPA 2013 ammonia criteria.

Comment # 4: The Antidegradation Review does not include financial analysis of the regionalization alternative. The cost of enhanced treatment technologies or alternative levels of treatment that would not cause degradation of the water quality in the receiving stream should also be provided.

## EPD response:

Regionalization is typically not considered if the closest major wastewater treatment plant is more than 5 miles away. Although the Cities of Hogansville and LaGrange are 13 miles apart, the actual distance between the two wastewater treatment plants is approximately 19 miles. The estimated capital cost of connecting the two plants is \$11,454,000. In addition, annual cost, which includes operation and maintenance of the force main and pump stations as well as treatment costs paid to the City of LaGrange, is estimated to be \$3,082,000. This alternative is more expensive than the proposed discharge alternative (Capital cost of \$6,437,000 and recurring annual cost of \$743,500).

The limits in the permit have been established to meet the applicable water quality standards or strategy for the receiving stream. The treatment process selected by the Professional Engineer of record is not only designed to meet these permit limits but should also be cost effective. A cost comparison between discharge alternatives with different levels of treatment is not required by Georgia's Rules and Regulations for Water Quality Control or by the Antidegradation Analysis guidelines.